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Theodor-Heuss-Strasse 11, D-67663 Kaiserslautern (DE).(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ,  
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2 May 2002For two-letter codes and other abbreviations, refer to the "Guid-  
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ning of each regular issue of the PCT Gazette.

(54) Title: USE OF CELL MEMBRANE PENETRATING INDIGOID BISINDOLE DERIVATIVES

(57) Abstract: The present invention relates to the use of cell membrane penetrating indigoid bisindole derivatives like indigo,  
bis (3-phenylindol-2-yl), isoindigo and indirubin derivatives for the manufacture of a medicament for the treatment of human solid  
cancers.

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00/03210

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/404 A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI Section Ch, Week 198608 Derwent Publications Ltd., London, GB; Class B02, AN 1986-052865 XP002164029 &amp; JP 61 007254 A (ISKRA INDUSTRY CO), 13 January 1986 (1986-01-13) abstract</p> <p>---</p>	1-3
X	<p>DATABASE WPI Section Ch, Week 198306 Derwent Publications Ltd., London, GB; Class B02, AN 1983-13067K XP002164030 &amp; JP 57 209271 A (ISUKURA SANGYO KK), 22 December 1982 (1982-12-22) abstract; example 17</p> <p>---</p>	1-3

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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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Date of the actual completion of the international search

27 March 2001

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## INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI  Section Ch, Week 198306  Derwent Publications Ltd., London, GB;  Class B02, AN 1983-13068K  XP002164031  &amp; JP 57 209272 A (ISUKURA SANGYO KK),  22 December 1982 (1982-12-22)  abstract</p> <p>---</p>	1-3
X	<p>DATABASE WPI  Section Ch, Week 199926  Derwent Publications Ltd., London, GB;  Class B04, AN 1999-303291  XP002164032  &amp; CN 1 207 924 A (LIU K),  17 February 1999 (1999-02-17)  abstract</p> <p>---</p>	1-3
X	<p>TSOU K C ET AL: "INDIGOGENIC PHOSPHO DI  ESTERS AS POTENTIAL CHROMOGENIC CANCER  CHEMO THERAPEUTIC AGENTS."  J MED CHEM, (1972) 15 (12), 1221-1225.,  XP000990197  scheme 1  abstract; table 2  page 1223, column 1, paragraph 2</p> <p>---</p>	1-3
X	<p>WU, KEMEI ET AL: "Potential antileukemic  agents. Synthesis of derivatives of  indirubin, indigo, and isoindirubin"  YAOXUE XUEBAO (1985), 20(11), 821-6,  XP000992384  the whole document</p> <p>---</p>	1-3
X	<p>LI L ET AL: "Chemical studies of  Strobilanthes cusia."  ACTA PHARMACEUTICA SINICA,  vol. 28, no. 3, 1993, pages 238-240,  XP000992418  the whole document</p> <p>---</p>	1-3
X,P	<p>WO 99 62503 A (EISENBRAND GERHARD ;CNRS  CENTRE NATIONAL DE RECH S (FR))  9 December 1999 (1999-12-09)  abstract  page 4, line 28 -page 10, line 8</p> <p>---</p>	1-3
E	<p>WO 00 61555 A (EISENBRAND GERHARD)  19 October 2000 (2000-10-19)  claims 1-12</p> <p>-----</p>	1-3

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 00/03210

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-3 (partially)

### Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 00/03210

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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JP 57209271 A	22-12-1982	JP 1284950 C JP 60009022 B	09-10-1985 07-03-1985
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